We Claim:

1. A turbine airfoil, comprising:

pressure and suction sidewalls extending longitudinally in span from a root to a tip, and extending in chord between leading and trailing edges, said sidewalls being spaced laterally apart between said leading and trailing edges and joined together by a first partition extending longitudinally between said root and said tip to define a first flow passage and a second flow passage, said first and second flow passages for flowing coolant fluid therethrough;

a plurality of cooling circuits embedded within said pressure sidewall, wherein each of said cooling circuits includes:

an inlet, said inlet provides a cooling flow path from said first flow passage into each of said cooling circuits, and

an exit aperture, said exit aperture provides a cooling flow path out of each of said cooling circuits to a region outside of the airfoil; and

a plurality of cooling circuits embedded within said suction sidewall, wherein each of said cooling circuits embedded within said suction sidewall includes:

an inlet, said inlet provides a cooling flow path from said second flow passage into each of said cooling circuits embedded within said suction sidewall, and

an exit aperture, said exit aperture provides a cooling flow path out of each of said cooling circuits embedded within said suction sidewall to said region outside the airfoil;

wherein said first flow passage is not in flow communication with said cooling circuits embedded within said suction sidewall and said second flow passage is not in flow communication with said cooling circuits embedded within said pressure sidewall such that said first flow passage feeds the coolant fluid to said cooling circuits that are embedded only within said pressure sidewall and said second flow passage feeds the coolant fluid to said cooling circuits that are embedded only within said suction sidewall.

2. The turbine airfoil according to claim 1, further comprising:

a third flow passage disposed between said first partition and said trailing edge, said third flow passage for flowing coolant fluid therethrough;

wherein said third flow passage is not in flow communication with said cooling circuits embedded within said suction sidewall such that said third flow passage feeds the

coolant fluid to a portion of said cooling circuits that are embedded within said pressure sidewall.

3. The airfoil of claim 1, wherein said exit aperture of each of said cooling circuits embedded within said suction sidewall and said pressure sidewall is a film cooling slot, said film cooling slot radially extends through said sidewalls and discharges said coolant fluid therefrom.

4. The airfoil of claim 3, wherein said film cooling slots of said suction sidewall are radially staggered relative to each other and said film cooling slots of said pressure sidewall are radially staggered relative to each other.

5. The airfoil of claim 1, wherein each of said cooling circuits embedded within said pressure sidewall and said suction sidewall includes a second inlet, said first and second inlets of each of said cooling circuits radially spaced apart.

6. The airfoil of claim 1, wherein each of said cooling circuits embedded within said pressure sidewall and said suction sidewall occupies a wall surface area no greater than about 0.06 square inches.

7. The airfoil of claim 5, wherein said first and second inlets are race track shaped whose length in the radial direction is greater than its width transverse to such direction.

8. The airfoil of claim 1, wherein the coolant fluid comprises air.

9. The airfoil of claim 1, wherein the airfoil having a longitudinal axis and said first and second flow passages extend longitudinally between said sidewalls.

10. A coolable blade or vane for a gas turbine, comprising:

an airfoil, said airfoil including:

pressure and suction sidewalls extending longitudinally in span from a root to a tip, and extending in chord between leading and trailing edges, said sidewalls being spaced laterally apart between said leading and trailing edges and joined together by a first partition extending longitudinally between said root and said tip to define a first flow passage and a

second flow passage, said first and second flow passages for flowing coolant fluid therethrough;

a plurality of cooling circuits embedded within said pressure sidewall, wherein each of said cooling circuits includes:

an inlet, said inlet provides a cooling flow path from said first flow passage into each of said cooling circuits, and

an exit aperture, said exit aperture provides a cooling flow path out of each of said cooling circuits to a region outside of the airfoil; and

a plurality of cooling circuits embedded within said suction sidewall, wherein each of said cooling circuits embedded within said suction sidewall includes:

an inlet, said inlet provides a cooling flow path from said second flow passage into each of said cooling circuits embedded within said suction sidewall, and

an exit aperture, said exit aperture provides a cooling flow path out of each of said cooling circuits embedded within said suction sidewall to said region outside the airfoil;

wherein said first flow passage is not in flow communication with said cooling circuits embedded within said suction sidewall and said second flow passage is not in flow communication with said cooling circuits embedded within said pressure sidewall such that said first flow passage feeds the coolant fluid to said cooling circuits that are embedded only within said pressure sidewall and said second flow passage feeds the coolant fluid to said cooling circuits that are embedded only within said suction sidewall.

11. The blade or vane of claim 10, wherein said blade or vane further comprises:

a third flow passage disposed between said first partition and said trailing edge, said third flow passage for flowing coolant fluid therethrough;

wherein said third flow passage is not in flow communication with said cooling circuits embedded within said suction sidewall such that said third flow passage feeds the coolant fluid to a portion of said cooling circuits that are embedded within said pressure sidewall.

12. The blade or vane of claim 10, wherein said blade or vane is fabricated from a metal selected from the group consisting of nickel based alloys and cobalt based alloys.

13. The blade or vane of claim 10, wherein said exit aperture of each of said cooling circuits embedded within said suction sidewall and said pressure sidewall is a film cooling

slot, said film cooling slot radially extends through said sidewalls and discharges said coolant fluid therefrom.

14. The blade or vane of claim 13, wherein said film cooling slots of said suction sidewall are radially staggered relative to each other and said film cooling slots of said pressure sidewall are radially staggered relative to each other.

15. The blade or vane of claim 10, wherein each of said cooling circuits embedded within said pressure sidewall and said suction sidewall includes a second inlet, said first and second inlets of each of said cooling circuits radially spaced apart.

16. The blade or vane of claim 10, wherein each of said cooling circuits embedded within said pressure sidewall and said suction sidewall occupies a wall surface area no greater than about 0.06 square inches.

17. The blade or vane of claim 15, wherein said first and second inlets are race track shaped whose length in the radial direction is greater than its width transverse to such direction.

18. The blade or vane of claim 10, wherein the coolant fluid comprises air.

19. The blade or vane of claim 10, wherein said airfoil having a longitudinal axis and said first and second flow passages extending longitudinally between said sidewalls.

20. A method for placing inlets of cooling circuits embedded within a first sidewall and a second sidewall of a coolable gas turbine airfoil, said first and second sidewalls extending longitudinally in span from a root to a tip, and extending in chord between leading and trailing edges, said sidewalls being spaced laterally apart between said leading and trailing edges and joined together by at least one partition extending longitudinally between said root and said tip to define at least two flow passages for flowing coolant fluid therethrough, said method comprising:

placing said inlets of said cooling circuits embedded within said first sidewall in flow communication with only one of said flow passages and placing said inlets of said cooling circuits embedded within said second sidewall in flow communication with at least one of

said other flow passages in order to minimize the difference in sink pressures of said suction sidewall and said pressure sidewall to ensure ingestion of the coolant fluid into said inlets of said respective cooling circuits.

21. The method of claim 20, wherein said first sidewall is a generally concave, pressure sidewall and said second sidewall is a generally convex, suction sidewall.

22. The method of claim 20, wherein said airfoil is fabricated from a metal selected from the group consisting of nickel based alloys and cobalt based alloys.

23. The method of claim 20, wherein each of said cooling circuits occupies a wall surface area no greater than about 0.06 square inches.

24. The method of claim 20, wherein said inlets are race track shaped whose length in the radial direction is greater than its width transverse to such direction.